AVOIDING POVERTY OVER TIME:

LOW-PAID WORKERS, HOUSEHOLDS AND WELFARE

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1. Introduction

This working paper reports on the methods, data analysis and key results from the project, *Avoiding poverty over time: households, work and welfare* (funded by the ESRC, res 000 22 1071). This project explores the relationship between low pay, household income sources and poverty over time. It builds on our previous research, which examined poverty avoidance –the extent to which people who might be at high risk of poverty are able to stay out of poverty - among low-paid workers using cross-sectional data from the Family Expenditure Survey (Millar and Gardiner, 2004; Gardiner and Millar, 2006). We found that hourly low-paid people avoid household poverty using three main strategies: work very long hours (including overtime and second jobs); live with other people (partners and other adults) who contribute earnings into the household; and access state transfers through the tax and benefit system. The use, and effectiveness, of these strategies varied according to gender and family type. This study builds on this cross-sectional analysis by developing a dynamic framework to explore the impact and sustainability of the strategies of low-paid people to avoid poverty over time.

The concept of 'poverty avoidance' provides a different way to think about the dynamics of poverty over time. The increased availability of good quality longitudinal data, covering substantial time periods, has transformed our understanding of the dynamics of poverty (see for example, Leisering and Walker, 1998; Gardiner and Hills, 1999; DWP, 2004; Rigg and Sefton, 2004; Kemp *et al,* 2004; Hills, 2005; DWP, 2005). Research on poverty transitions – movements into and out of poverty between one year and the next – has sought to understand the 'triggers' that drive these moves, mainly comparing the relative importance of labour market and demographic events (Jenkins and Rigg, 2001; Jenkins and Schluter, 2003). But these events are not always triggers and do not necessarily lead to poverty exit or entry in that some people will experience the event but not the poverty transition. Thus these people *avoid* rather than escape poverty. They are in a high-risk situation, which for many people does lead to poverty, but they are not poor. Analysing poverty avoidance for people with a high risk of poverty – in this case the low-paid – may thus provide evidence to help us understand what protects people against poverty and to explore the relationship between individual resources and household circumstances in providing poverty protection.

Focusing on poverty avoidance and the strategies that people might use to avoid poverty at any one time, and the implications of these over time, can also provide a way to explore how

people manage and cope with poverty risks. How individuals and families cope with – and escape from – poverty is an issue that has received increasing attention in the literature on poverty and social exclusion. Understanding the processes that put people at risk of poverty, or which protect them from it, is an important part of the research agenda for policy purposes (Room, 2000; Hills, 2002). This research agenda includes a focus on the active way in which people themselves respond to their situations and in particular their responses to risk events, or contingencies, and the resources that they are able to call upon. Lister (2004) identifies four 'forms of agency' exercised by people in poverty. These are 'getting by' (coping and managing), getting back at (everyday resistance including fraud and rule-breaking), getting out (trajectories of change) and getting organised (political responses). Our focus is people at risk of poverty, rather than people in poverty, and we are examining the relationship between getting out and staying out (to use Lister's terms), in that we are exploring whether the 'strategies' that low-paid people use to avoid poverty have implications for the likelihood that they will continue to avoid poverty in the future (see section 4 for further discussion of the concept of strategies).

Here we are focusing on low pay as a situation with a high potential poverty risk. Our previous research found that about 23 per cent of employees were low paid (below two-thirds of the median) in 2000/01 and 14 per cent of these low-paid people were poor (household income below 60 per cent of the median before housing costs), which is about 0.8 million people. This compares with a poverty rate of five per cent of all employees. Thus low-paid people have almost three times the poverty risk of employees in general. So, although most low-paid people are not poor and although poverty rates are highest among non-employed people, low pay is nevertheless a high risk situation for poverty. There is also a wider group of people at risk of low pay, given the movements between unemployment and low pay. Low-paid people have a higher risk of unemployment than those who are not low-paid and movements out of low pay are often movements into unemployment or into other low-paying jobs rather than movements into better-paid work (Stewart, 1999; Stewart and Swaffield, 1999; McKnight, 2002). As Kemp *et al* (2004, p30) note in their discussion of low pay in the context of 'ladders out of poverty', there is a 'strong degree of persistence in low pay from one year to the next. Low pay is not a transient experience for many low-paid employees: low-paid workers tend to remain low paid. The persistence of low pay is related not only to the characteristics of the workers concerned. but also to the very fact of having been low paid… low-paid jobs do not act as stepping stones to better-paid jobs; they are more likely to constitute blind alleys from

which there is relatively little prospect of escape'. The groups that the government is seeking to bring into employment - lone parents, people receiving incapacity benefit, the long-term unemployed – are unlikely to be able to command high wages and many will be in low-paid work. Thus low-paid work may be the most likely alternative to unemployment for many people. Understanding what protects low-paid workers from poverty, and whether this varies for people in different situations, is therefore of particular importance in the current policy context.

1.1 Aims and objectives

The main aims of this project were:

1. To add to the literature on poverty transitions by seeking to explain the chances of avoiding poverty, focusing on the strategies which help to keep the low-paid out of poverty rather than the events associated with entering or exiting poverty;

2. To inform policy by providing evidence on the potential strategies to keep low-paid people out of poverty, their effectiveness, and the impact of policies intended to improve the chances of avoiding poverty of the low-paid (such as tax credits).

In order to meet these, we set the following objectives:

- Developing a methodology to analyse strategies to avoid poverty over time for the low-paid population, in particular exploring the impact of partners and other adults in the household.

- Establishing a framework to decompose the overall impact of these strategies into their effectiveness in keeping low-paid people out of poverty and how wide-spread they are;

- Applying the methodology using data from 12 waves of the BHPS to produce results for the period 1991 to 2003, including breakdowns for different subgroups and evidence on changes over time.

1.2 Data and analysis

The data is drawn from the first twelve waves of the British Household Panel Survey (BHPS), for the years 1991 to 2002[1]. The BHPS collects information on a representative sample of British households with annual interviews; the first wave of the BHPS was designed as a nationally representative sample of some 5,500 households covering some 10,000 persons. Since then, original sample members have been re-interviewed every year, where possible (even if the household moves or splits up). All members of any household containing an original sample member are interviewed, and thus new people are added to the sample, as well as lost. See Taylor (1994) and Taylor (1998) for detailed information about the BHPS.

The analysis involves three main stages:

1. The extent and persistence of low pay and poverty among employees and the low-paid in the BHPS over the period 1991 to 2002.
2. The extent to which all employees and low-paid employees continue to avoid poverty over two consecutive years.
3. The strategies used to avoid poverty over consecutive years, singly and in combination.

These stages provide the three sections of this paper (sections 2 to 4) and we describe how we have defined these terms and operationalised these definitions at the start of each section. Our main attention here is on the dynamic analysis (stages 3 and 4), so the first section is relatively brief, setting the scene for the analysis of poverty avoidance over time.

2. Low pay and poverty 1991 to 2003

2.1 The low pay status of employees and low-paid employees

In this section we examine the incidence of low pay among employees for each year 1991 to 2002. Low pay is defined as gross hourly wages below two-thirds of the median in each year.

[1] Our thanks go to the data providers: University of Essex. Institute for Social and Economic Research, *British Household Panel Survey; Waves 1-12, 1991-2003* [computer file]. Colchester, Essex: UK Data Archive [distributor], June 2004. SN: 4967.; and Bardasi, E. and Jenkins, S.P., *British Household Panel Survey Derived Current and Annual Net Household Income Variables, Waves 1-12, 1991-2003* [computer file]. *5th Edition.* University of Essex. Institute for Social and Economic Research, [original data producer(s)]. Colchester, Essex: UK Data Archive [distributor], June 2004. SN: 3909.

The sample includes all employees aged 16 and over[2]. The people who are low paid in one year will not necessarily be the same people who are low paid in the next year so we also examine the persistence of low pay over a number of years.

Table 2.1 shows the extent of low pay in Britain in each of the twelve years for which we have BHPS data. At the beginning of the period, in 1991, around 21 per cent of all employees were low paid, gradually rising to a peak figure of 24 per cent in 1996. After that the proportion of low paid consistently declined, reaching around 21 per cent in 2000, with signs of small increases in the low-paid population after 2000.

Table 2.1 also compares men and women. This shows that women are much more likely to be hourly low paid than men, as we know from other sources as well, and also that there has been little change in the proportions of men and women who are low paid during the 1990s. Among men the proportion low paid rose from about 12 percent to a high point of 15/16 percent in the mid 1990s, and back to 14 per cent by 2002. Among women there was also a slight rise in the mid 1990s, but little significant variation from a figure of around 30/31 percent. As noted in the introduction above, the level of the national minimum wage is below our low pay threshold, and therefore there is no apparent impact of the introduction of the national minimum wage in April 1999. In fact the main impact was to take people from below to just above the national minimum wage level (Dickens and Manning, 2003) and so most of the people who benefited would still be low paid by this definition.

Table 2.1 Proportion of employees in each year who are low paid, 1991 to 2002

Year	Employees	Men employees	Women employees
	%	%	%
1991	21	12	31
1992	22	13	31
1993	23	14	32
1994	23	15	31
1995	23	15	31
1996	24	16	33
1997	22	15	30
1998	22	14	30
1999	21	13	29
2000	21	14	28
2001	23	14	31
2002	22	14	30

[2] For more information on definitions of the employee sample and pay variables, see Annex.

Table 2.2 shows the proportion of employees who were ever low paid in any four year period, and the number of times in that period that people were low paid. The sample includes only those who were present in the data as employees for four consecutive years and the results are for a pooled sample of all nine four-year windows during the 12 year data window. To be able to look at repeated experience of low pay over a certain period we need to restrict the sample to those who were present in every year (otherwise it is impossible to interpret the results eg. if someone is low paid for two years out of four but they were only present in the data for two years, whilst others are present for three or four years then we are not making a consistent comparison across individuals).

However, once we begin to restrict our sample to individuals who are present for a minimum number of consecutive years we face two problems. Firstly, we lose a large number of observations (because many individuals do not fully respond to the survey in every year) which, in extreme cases, may make our estimates less robust. Secondly, the observations we lose when we make these restrictions are not a random selection of our cases and thus restricting the sample tends to bias its composition.

Hence, the employees in the sample defined in this way (i.e in the sample as employees for four consecutive years) are less likely to be low paid than the sample of all employees in each year. The mean average rate of low pay in this restricted sample in the first year of each four year window is 18 per cent, compared with around 21-23 percent for most years, as shown in Table 2.1. Whilst we would be interested in examining the experience of low pay over the full 12 years of our data, this would mean analysing the much smaller sample who are only available for the full 12 years, so, because of the potential problems arising from such strict sample restrictions, we instead concentrate on those present for any four consecutive years. This represents a trade-off between these competing considerations and is a definition of persistence which has been used elsewhere (see Jenkins and Rigg, 2001, and DWP, 2004, and also the Government's *Opportunity for All* reports, e.g DSS, 1999, DWP, 2005).

As would be expected, looking over time like this gives a higher figure for the prevalence of low pay than the simple cross-section. Just over a quarter (26 per cent) of employees were low paid at least once during any four consecutive years over the 12 year period, compared with

the average 18 per cent who were low paid in one year. About eight per cent of employees experienced just one spell of low pay over any four years. Defining 'persistent' low pay as three or four spells of low pay over four years, 13 per cent of employees were persistently low paid.

The picture is quite different for men and women. Among men 17 per cent had at least one spell of low pay compared with the 10 per cent of this sample with low pay at one point in time. Among the men, six per cent were persistently low paid. Among women 36 per cent had at least one spell of low pay compared with the 26 per cent of this sample with low pay at one point in time, and 20 per cent – one in five – women employees were persistently low paid during any four consecutive years in the twelve year period.

Table 2.2 Number of times low paid in 4 years

	Employees	Men employees	Women employees
	%	%	%
Never	74	83	64
At least once	26	17	36
Number of times			
1	8	7	9
2	5	4	7
3	5	3	7
4	8	3	13
3 or 4 (persistent)	13	6	20
No of observations	23,706	12,050	11,656

1. Individuals must be present in the data as employees for four consecutive years
2. Results are for pooled sample of nine four-year windows
3. Employees in this sample are less likely to be low paid than all employees – the average rate of low pay in this sample in the first year of each four year window is 18 per cent (10 per cent for men and 26 per cent for women) cf. Table 2.1.

2.2 The poverty status of employees and low-paid employees

The poverty definition used here is consistent with that used in the Households Below Average Income (HBAI) series (DWP, 2005a). The poverty line is set at 60 per cent of median household equivalised disposable income before housing costs, calculated for each year of the data. All sources of regular household income are included, net of deductions for tax and national insurance, and total income is then adjusted to take account of household size and compostion[3]. As in the HBAi, we are using a household measure of poverty, iin which all income coming into the household is assumed to be equally available to all members of that

[3] Using the McClemant's equivalnce scale; see Annex for further details.

household. Hence, if one person in the household is poor then they are all poor. This assumption about equal income-sharing is standard in studies of poverty based on household data, but specific studies of acess to income within a household show that income is not always shared this way (Vogler and Pahl, 1993; Goode *et a*l, 1998, Rake and Jayatilaka, 2002).

Table 2.3 presents the results for poverty rates in Britain in each of the years of the BHPS, using this household income poverty definition. The first column shows the population as a whole, the second includes just employees and the third focuses on low-paid employees.

Table 2.3 Poverty rates: household equivalent income below 60 per cent of median, 1991 to 2002

Year	All (adults and children)	Employees (aged 16 plus)	Hourly low-paid employees
	%	%	%
1991	21	5	14
1992	20	4	11
1993	20	5	14
1994	19	4	12
1995	18	5	13
1996	19	5	14
1997	20	5	14
1998	20	5	15
1999	19	5	14
2000	19	5	14
2001	17	4	11
2002	17	5	14

For the population as whole, poverty is at its highest level, around 20 per cent, in the early 1990s with signs of a reduction of a couple of percentage points by the mid-1990s. The poverty rate then rises over the late 1990s but appears to fall again significantly to its lowest level, of about 17 per cent, by the end of the period. This is similar to the trends shown in the HBAI analysis (DWP, 2005) and in other studies (Sutherland *et a*l, 2003). The trends for all employees and for low-paid employees reflect the pattern for the population as a whole. Around four to five percent of employees are in poverty, compared with around 11 to 15 per cent of low-paid employees. The low paid are thus typically about three times as likely as employees in general to be living in poverty.

As with low pay, looking over a longer window of time shows a higher incidence of poverty. As just shown, employed individuals have a risk of poverty of about four/five per cent at any one point in time. Table 2.4 follows the same approach as in the analysis of the dynamics of low pay above, analysing pooled data over four year windows and including those who are present as employees for four consecutive years. This shows that about eight per cent of employees in general were in poor households at least one, most of these having just one spell in poverty but about two per cent being persistently poor. For men employees, six per cent experienced at least one spell in poverty and one per cent were persistently poor. For women employees, nine per cent experienced at least one spell in poverty and two per cent were persistently poor. Thus women employees in general are more likely to experience poverty persistence than male employees in general.

Table 2.4 Number of times poor in 4 years

	Employees	Men employees	Women employees
	%	%	%
Never	92	94	91
At least once	8	6	9
Number of times			
1	5	4	6
2	2	1	2
3	1	1	1
4	1	*	1
3 or 4 (persistent)	2	1	2
No of observations	23,706	12,050	11,656

1. * less than 0.5 per cent
2. Individuals must be present in the data as employees for four consecutive years
3. Results are for pooled sample of nine four-year windows
4. Employees in this sample are slightly less likely to be poor than all employees – the average rate of poverty in this sample in the first year of each four year window is 3 per cent (3 percent for men and 4 per cent for women) cf. Table 2.3.

Table 2.5 also focuses on those who were employees for four consecutive years, but with the added condition that they also be low-paid in at least one of the four years, so as to examine the poverty persistence of the low-paid population. This shows that the low-paid are two and a half times more likely to experience poverty (20 per cent compared with 8 per cent) and poverty persistence (5 per cent compared with 2 per cent) in a four year period than employees in general. In contrast to the previous table, we find that amongst the low-paid population poverty and poverty persistence is as common amongst men as women.

Table 2.5 Number of times poor in 4 years, low-paid employees

	Low-paid Employees	Men low-paid employees	Women low-paid employees
	%	%	%
Never	80	80	80
At least once	20	20	20
Number of times			
1	11	11	12
2	5	5	5
3	3	3	3
4	2	2	2
3 or 4 (persistent)	5	5	5
No of observations	6,367	2,095	4,272

1. Individuals must be present in the data as employees for four consecutive years and low-paid for at least one of these.
2. Results are for pooled sample of nine four-year windows
3. Low-paid employees in this sample are less likely to be poor as all low-paid employees – the average rate of poverty in this sample in the first year of each four year window is 9 per cent (10 per cent for men and 9 per cent for women) cf. Table 2.3.

3. Continuing to avoid poverty over time

The above analysis shows that most employees, and most low-paid employees, do not experience either multiple spells of poverty, nor are they persistently poor in consecutive spells. This is true for both men and women. Those with low hourly pay do have a higher risk of poverty than all employees, but most avoid poverty in both the immediate and the longer term. About a quarter of employees experience low pay, but only eight per cent of employees experience poverty. Here we start to explore how and why this might be the case, in this section by estimating the average chance of staying out of poverty over time and in the next section by comparing different strategies for doing so.

We define 'continuing to avoid poverty' or 'ongoing poverty avoidance' as the proportion of non-poor individuals in one year who remain non-poor a year later[4]. Thus, we start with those low-paid employees who are not poor (in any one year this means 79-83 per cent of employees and 85-89 per cent of the low paid) and calculate the average chance of avoiding poverty for these employees and low-paid employees at the next observation. This is thus a measure of

[4] To produce estimates of the chances of avoiding poverty we adopt the same method as is commonly used to examine poverty transitions (movements into or out of low income between one year and the next), defining the chance of avoiding poverty to be one minus the chance of entering poverty (see, for example, Bane and Ellwood, 1986, Jenkins, 2000 and Stevens, 1999). In practice, this means that for each and every pair of consecutive years we estimate the proportion of our sample who avoid poverty over time: of those who are non-poor in the first year how many remain non-poor in the second year.

poverty avoidance over a one-year time gap. If you managed to avoid poverty in year one, what is the likelihood that you will also avoid poverty in year two? Thus our approach is different from many studies which calculate the likelihood of escaping poverty (if you are poor in year one, what are the chances that you will no longer be poor in year two?), or of falling into poverty (if you are not poor in year one, what are the chances that you will be poor in year two?). Our focus is on the persistence of *non-poverty* over time, rather than the persistence of poverty, or the transitions between poverty and non-poverty[5].

Table 3.1 shows the probability of continuing to avoid poverty for low-paid employees between one year and the next for each pair of years between 1991 and 2002. Taking the most recent pair of years (2001 to 2002), this shows that 90 percent of non-poor low-paid employees in 2001 were still non-poor one year later. This means that most low-paid people were able to stay out of poverty over the one year period. This could be because whatever they were doing to avoid poverty in 2001 was still enabling them to stay out of poverty (for example, they were still living in a two-earner household). Or it could be because they were now doing something else that was keeping them out of poverty (for example, they could have moved to a better paid job, or started receiving tax credits). We explore the impact of such changes in Section 4 below.

As Table 3.1 also shows, comparing each of the pairs of years show no significant difference in the ongoing poverty avoidance rate, the chances of low-paid employees continuing to avoid poverty ranged from 89 per cent (1992 to 1993) to 94 per cent (2000 to 2001). The latter was significantly higher than for the other pairs of years. However, given that the chances of avoiding poverty fell back again in the following pair of years, there is no suggestion of a continuing trend and we cannot be sure that this is a robust finding. Thus, overall, in the 1990s the chances of low-paid people avoiding poverty over time did not appear to change. This was also true for employees in general.

[5] To be considered as having avoided poverty between one year and the next, the income needs to be above the poverty line in both years; unlike some studies, we do not allow for small movements below the poverty line to count as remaining non-poor.

Table 3.1 Continued poverty avoidance in two consecutive years: changes over time for low-paid employees

Low paid in first of pair of years	Per cent	N	Confidence interval	
1991 to 1992	90	666	87	92
1992 to 1993	89	678	87	92
1993 to 1994	93	689	91	95
1994 to 1995	88	689	86	91
1995 to 1996	90	729	88	93
1996 to 1997	92	810	91	94
1997 to 1998	91	873	89	93
1998 to 1999	91	863	89	93
1999 to 2000	90	1,139	87	92
2000 to 2001	**94**	**1,104**	**92**	**95**
2001 to 2002	90	1,020	89	92

1. 'Continued poverty avoidance' is the proportion of those who are non-poor in the first year who remain non-poor in the second year
2. Weighted
3. Bold indicates a statistically significant result

The relative stability of the poverty avoidance rates over time means that we can in effect abstract from the chronological years and carry out an analysis which explores change from one year to the next by pooling the data from all the years. Thus in order to look at changes over a two-year period (from year 1 to year 2) we create a single sample including all of the eleven pairs of years shown in Table 3.1 above. This substantially increases the sample size available to us and allows for a more robust and detailed analysis. We focus on year to year changes over a one-year period because we want to examine the relationship between the strategy in one year and the chances of avoiding poverty in the next year (see section 4). The sample for this analysis could be defined in various ways. It could include just those who were low-paid employees (and all employees, for comparative purposes) at the first time period and examine what happens to them. It could be defined as only those who were low-paid employees in both time periods, or those who were low-paid employees in either period. We tried out several of these combinations (see further discussion in the Annex) and elected to define the sample of low-paid an all employees on the basis of the status in the first of a pair of consecutive years.

We select this sample for both practical and theoretical reasons. From a practical point of view, it provides us with a bigger sample (compared with some of the other options), which is more likely to produce results which are robust and where differences between groups are statistically significant.

From a conceptual point of view, what we are interested in is, for non-poor low-paid people, how does the strategy they use at one point in time affect their chances of still being out of poverty a year later. We do not want to exclude those whose status is no longer low-paid in the second year (whether they be paid more than "low pay" or not paid at all), since the way in which the strategy may have impacted on their poverty status may have been through effecting a change in their labour market status. Consider the following example: someone whose strategy in the first year is to work long hours and then managed to secure a promotion at work by the second year, no longer being low-paid and therefore have continued to avoid poverty. We are interested in examining such cases and analysing how their strategy in the first year is related to their poverty outcomes in the second year[6].

Thus we always start with people who are not poor in order to examine whether or not they continue to avoid poverty. As discussed above, we are focusing on the chances of *staying out of poverty*. Here we are comparing low-paid and all employees in respect of their chances of staying out of poverty over a period between two points in time a year apart, and also comparing sub-groups within these. The overall picture is statistically significantly different for low-paid employees as compared with all employees, as shown in table 3.2. Employees in general are more likely (96 per cent) to continue to avoid poverty than are low-paid employees (91 per cent). Focusing just on the non-low-paid employees then 97 per cent continue to avoid poverty over two consecutive years.

Table 3.2 Continued poverty avoidance in two consecutive years

In first of pair of years:	Low-paid employees	Non-low-paid employees	All employees
Mean	91%	97%	96%
Confidence interval	90-92	97-97	96-96
Number	9,260	36,097	45,357

1. 'Continued poverty avoidance' is the proportion of those who are non-poor in the first year who remain non-poor in the second year
2. Includes data from all 12 years
3. Weighted

Table 3.3 shows how the average chance of continuing to avoid poverty between one year and the next varies with the length of time that one has already avoided poverty. Here we focus on those people for whom we know in detail their poverty history over previous years – they were

[6] To help us to understand our results for how the chances of avoiding poverty over time vary with the strategy used, we look at the relationship between strategy used in year one and changes in labour market status between years one and two in Table 4.7.

poor, then non-poor in all consecutive years. So these are people who have had some experience of poverty at some point but who have managed to escape that poverty and then continued to stay out of poverty in subsequent years. As we might expect, the chances of staying out of poverty rise with the number of years one has already avoided poverty.

Looking first at the figures for all employees shows that for those who have only been out of poverty for only one year (implying that in the year before that they were observed to be poor), the chances of avoiding poverty in the next year are only about 77 per cent. These employees thus have a higher chance than others of dipping back into poverty. The chances of avoiding poverty rise significantly to 88 per cent for those who have avoided poverty for two consecutive years; and those employees who have avoided poverty for five years in a row or longer have an average chance of avoiding poverty in the next year which is almost 20 percentage points higher than for those with a spell of only one year. The confidence intervals show that several of these differences by spell length are statistically significant.

A similar picture is provided for the low paid, but with lower average chances of avoiding poverty for the same length spell, when compared with all employees. The mean estimates for the low paid, although less than those for all employees, are not statistically significantly different but this could be due to the small samples of low-paid people resulting in rather large confidence intervals.

Table 3.3 Continued poverty avoidance by duration of poverty avoidance

	Mean	N	Confidence interval	
Low-paid employees				
1 year	72	665	68	75
2 years	84	357	80	88
3 years	85	208	80	90
4 to 5 years	92	230	89	96
6 to 10 years	92	141	88	98
All employees				
1 year	77	1,465	75	79
2 years	88	932	86	90
3 years	90	641	88	92
4 years	93	464	91	95
5 to 6 years	96	620	94	97
7 to 10 years	96	406	94	98

See notes to table 3.2

3.1 Ongoing poverty avoidance: characteristics

In this sub-section we examine the characteristics of those who continue to avoid poverty over time. Table 3.4 compares men and women and shows that among all employees, men have significantly better chances of ongoing poverty avoidance than women, but there are no significant differences in chances of avoiding poverty over time between low-paid men and women[7].

Table 3.4 Continued poverty avoidance by sex

	Sex	Mean	N	Confidence interval	
Low-paid employees	Men	92	2896	91	93
	Women	91	6364	90	92
All employees	Men	96	22,871	96	96
	Women	96	22,486	95	96

See notes to table 3.2

Table 3.5 shows that there is a very different pattern in the chances of avoiding poverty by age group, depending upon whether one looks at all employees or just the low-paid employees. For all employees, the youngest age group have the poorest chances of avoiding poverty, significantly below that of the other age groups. This means that young people in work are less able to stay out of poverty from one year to the next. Those aged 51 or above also have significantly worse chances of avoiding poverty than those aged 22 to 35 or 36 to 50 (but better than the 21 and under age group). However for the low-paid, it is the 22 to 35 years age group who have significantly worse chances of avoiding poverty than other age groups (those under 22 and 36 to 50).

Table 3.5 Continued poverty avoidance by age group

	Age group	Mean	N	Confidence interval	
Low-paid employees	21 or under	92	2,434	91	93
	22 to 35	90	2,737	89	91
	36 to 50	92	2,403	91	93
	51 or over	90	1,686	88	91
All employees	21 or under	93	3,864	92	94
	22 to 35	96	17,263	96	97
	36 to 50	97	16,710	96	97
	51 or over	95	7,520	94	95

See notes to table 3.2

[7] Rounding of the figures in Table 3.4 mean that it is not clear that there are significant differences between male and female employees but the more precise figures do show this.

Table 3.6 looks at household composition[8]. Broadly speaking, the pattern of results by household composition is similar for low-paid and for all employees. For both groups, the ranking of the four main family types (with differences not necessarily being statistically significant) are lone parents having the poorest chances of continuing to avoid poverty over time, followed by childless single people, then couples with children, and childless couples having the highest chances of avoiding poverty over time.

Living in a household with other adults tends to be more common among low-paid people than employees in general, especially for single people. For most family types, those low-paid people who do live with others are more likely to be able to continue to avoid poverty than those who do not. Thus, for example, low-paid single people have an 82 per cent chance of ongoing poverty avoidance compared with 95 per cent for single people who live with others in the household. For lone parents, the rate of ongoing poverty avoidance rises from 72 to 78 per cent, for 93 to 97 per cent for childless couples, and from 90 to 96 per cent for couples with children. For the low-paid, living with other adults reduces the inequalities in avoiding poverty between the family types (childless singles gain the most from living with other adults, whilst childless couples gain the least). For all employees, however, there is little difference in the poverty avoidance rate between those who live in a single family and those who live with others.

[8] We refer to an adult plus any partner (married or cohabiting) plus any dependent children as a 'family'. Hence, many households are made up of more than one family (for example a household of three single students would count as a three family unit household). Where someone lives in a houshold with people that are not in their own family unit (ie. adults other than their partner), we refer to this as 'living with other adults'.

Table 3.6 Continued poverty avoidance by household composition

	Household composition	Mean	N	Confidence interval	
Single family households – no other adults					
Low-paid employees	Single, no children	82	481	78	85
	Single, children	72	222	66	78
	Couple, no children	93	1,830	91	94
	Couple, children	90	1,918	89	92
All employees	Single, no children	94	4,185	94	95
	Single, children	87	994	85	89
	Couple, no children	97	12,962	97	97
	Couple, children	96	13,755	95	96
Multiple family households – with other adults					
Low-paid employees	Single, no children	95	2,570	94	96
	Single, children	78	57	67	89
	Couple, no children	97	676	96	98
	Couple, children	96	307	94	98
All employees	Single, no children	95	6,869	95	96
	Single, children	88	293	84	92
	Couple, no children	98	4,032	97	98
	Couple, children	97	2,267	97	98

1. See notes to Table 3.2.

The number of workers in the household makes a difference to the chances of avoiding poverty over time, as Table 3.7 shows. For both the low-paid and all employees, the chances of continuing to avoid poverty improve significantly with the number of workers in the household. A low-paid person with two workers in their household has, on average, similar chances of ongoing poverty avoidance to an average employee with one worker in their household

Table 3.7 Continued poverty avoidance by number of workers in the household

	Number of workers in the household	Mean	N	Confidence interval	
Low-paid employees	1	83	2,428	81	84
	2	93	4,355	92	94
	3+	96	2,477	95	97
All employees	1	93	13,580	92	93
	2	97	24,397	97	97
	3+	98	7,380	97	98

See notes to Table 3.2.

As Table 3.8 shows, for the low-paid and all employees, the chances of continuing to avoid poverty fall as the number of children in the household increase (with not all differences being significant)

Table 3.8 Continued poverty avoidance by number of children in the household

	Number of children in the household	Mean	N	Confidence interval	
Low-paid employees	0	92	5,292	91	93
	1	91	1,977	90	93
	2	89	1,456	88	91
	3+	86	535	83	89
All employees	0	96	26,270	96	97
	1	96	8,723	96	96
	2	95	7,888	95	96
	3+	91	2,476	90	92

See notes to Table 3.2.

The pattern of chances of ongoing poverty avoidance by housing tenure is similar for the low-paid and all employees, as shown in Table 3.9. For both the low-paid and all employees, local authority renters have significantly worse chances of continuing to avoid poverty over time than other tenure groups. For both the low-paid and all employees, housing association and private renters have significantly poorer chances of continuing to avoid poverty than those who own their homes (either with a mortgage or outright). Among all employees, those who own their homes with a mortgage have significantly higher chances of continuing to avoid poverty than all other tenure groups.

Table 3.9 Continued poverty avoidance by housing tenure

	Housing tenure	Mean	N	Confidence interval	
Low-paid employees	Owned outright	92	1,354	91	94
	Owned with mortgage	94	4,945	94	95
	LA rented	82	1,544	80	84
	HA rented	87	430	84	91
	Private rented	87	978	85	89
All employees	Owned outright	95	5,692	95	96
	Owned with mortgage	97	30,873	97	97
	LA rented	88	3,888	87	89
	HA rented	91	1,260	90	93
	Private rented	93	3,603	93	94

See notes to Table 3.2.

3.2 Summary

Here we have been examining the chances of staying out of poverty over time, and how this varies for low-paid employees compared with employees in general. The majority of low-paid workers are not poor, so this group is our starting point – do they manage to stay out of poverty over time, or do they have a higher risk of becoming poor than employees in general? The answer is that they do, in general, manage to stay out of poverty. On average, the chances that a low-paid non-poor person will still be non-poor the following year is about 91 per cent. This varies according to how long that person has been out of poverty. For those who had only one previous year out of poverty the chances of continuing to avoid poverty fall to about 72 per cent. But if they have been out of poverty for at least six years, the chances of continuing to avoid poverty rise to 96 per cent. Low-paid women and men are just as likely to be able to continue to avoid poverty, but those in the 22 to 35 age group have the lowest average chance. Low-paid lone parents also have a lower than average chance of continuing to avoid poverty, but their chances of doing so are better if they live with other adults. Having other adults in the household, and in particular having other workers, increases the chances for low-paid people of continuing to avoid poverty over time. Those with none or just one child have a better chance of continuing to avoid poverty than those with larger families. Low-paid people who live in local authority accommodation have the lowest chance of continuing to avoid poverty.

Although most low-paid people continue to avoid poverty, they are less likely to do so than employees in general. About 96 per cent of employees who were not poor stay out of poverty. In general the characteristics associated with a higher or lower chance of continuing to avoid poverty are much the same as for the low-paid employees. But there are some differences. Among employees in general women have less of a chance of continuing to avoid poverty than do men, and it is the youngest and the oldest age groups who are least likely to be able to continue to avoid poverty.

4. Strategies for ongoing poverty avoidance over time

In examining ‘strategies’ to continue to avoid poverty over time we need to consider those aspects of an individual’s household circumstances which improve their chances of avoiding poverty over time. We call these ‘strategies’, although the nature of the data we use does not show whether individuals use these ‘strategies’ in a deliberate sense, with the specific intention of avoiding poverty. Indeed, individuals may be observed to using certain strategies without

this being part of a conscious intention to avoid poverty - for example, people may live with extended family because they want to and not because they want to share incomes. In addition, not all of these strategies are available to all people in the same way, and people may have different preferences between these. For example, working long hours may not be an option for some people. What determines the strategies people actually use will thus depend on both the available options and preferences.

We developed the set of strategies to examine – shown in Box 4.1 - from our previous research in a cross-sectional setting (Millar and Gardiner, 2004). These were: own market income, partner's market income, benefits and tax credits and the market income of other adults in the household. These all refer to sources of income coming into the household. One significant, and somewhat unexpected, finding from our earlier analysis was the extent and importance of living with others as a way of avoiding poverty. Those who lived with other adults were better able to avoid poverty than those who did not. We therefore decided to include living arrangements (living with other adults) as a specific strategy, and to explore this in more detail, distinguishing whether additional household members are important because they boost the household's income from paid work, or because the presence of other adults has an effect in other ways. For example, these adults may contribute sources of income other than earnings, such as benefits; or they may take on responsibilities for caring for children or domestic work, thus freeing up time for other household members to take on paid work. This latter could be seen as a 'breadwinner/carer' model, in which people specalise in different activities in the household. We therefore also look at whether these other adults are employed (and so bringing income into the household) or whether they are not employed (and so potentially contributing time to support others in employment).

As Box 4.1 shows, this gives a total of four main strategies, divided into a total of nine when we include the employment status of partners and other adults. These four main strategies are not necessarily mutually exclusive – someone could work long hours *and* have an employed partner, or live with other adults *and* receive tax credits, and other combinations would also be possible. We therefore consider these strategies both singly and in various combinations. Note that the variations relating to the employment or non-employment of partners and other adults are sub-sets of the main category (that is, 2a is the sum of 2b and 2 c, and 4a is the sum of 4b and 4c).

Box 4.1 Strategies to avoid poverty

1. Working long (more than 41) weekly hours[1] in his/her main paid work and/or having subsidiary jobs.

2. Living with a partner
   a. all having a partner
   b. having a partner who is an employee
   c. having a partner who is not an employee

3. Tax credits and benefits which constitute at least 7 per cent[1] of household income.

4. Living with other adults
   a. all living with adults other than partner
   b. living with other adults, at least one of whom is an employee
   c. living with other adults, none of whom are employees
   d. living with other adults, all of whom are employees

1. These thresholds represent the 75th percentile point for all employees.

In the analysis of strategies to avoid poverty we adapt the framework used by Jenkins and Rigg (2001) to examine the relationship between events and poverty transitions. We are seeking to estimate both the prevalence of each strategy and how successful that strategy is. These measure different aspects of the importance of the different strategies. For example, it may be that working long hours is a highly effective way to continue to avoid poverty, but one that very few people use - it has a high success rate but is not very common in practice. Or the opposite might be the case, that working long hours is not a very effective way to avoid poverty even though lots of people do this. Hence, when we combine these two factors we can determine the overall impact of each strategy.

We thus focus on three key areas of analysis:

1. The *prevalence* of each strategy. Of all the cases where individuals avoid poverty in the first period[9], the proportions that use the various different strategies.

[9] Where we say 'in the first period' we mean in the first year of the two consecutive years for which we measure the chances of continuing to avoid poverty.

2. The *success rate* of each strategy. For all the cases where individuals avoid poverty in the first period, the probability of continued poverty avoidance associated with having used each strategy.

3. The *overall impact* of each strategy. The share of all cases where poverty is avoided over time which is accounted for by each strategy.

4.1 Prevalence of the strategies

Table 4.1 shows the proportion of employees and of low-paid employees who avoid poverty at the first period of observation with each of the strategies. This shows that some strategies are more common among non-poor employees in general (remembering that this includes 96 per cent of all employees), some occur more often among the non-poor low-paid employees (91 per cent of all low-paid employees), and some are used by similar proportions of the two groups. This will be of interest later, when we analyse which strategies prove to be the most important for ongoing poverty avoidance.

Working long hours in one's main job and/or having multiple paid jobs is equally as common among the low paid as it is amongst all employees: about one in three do this. Compared with all employees, low-paid people are less likely to have a partner (58 per cent compared with 72 per cent), and are also less likely to have an employed partner (42 per cent compared with 53 per cent). The low-paid employees are much more likely than all employees to have state benefits and tax credits which make up a high proportion (defined as 'more than seven per cent') of household income (37 per cent versus 24 per cent). This is perhaps what we would expect, given that many of these transfers are means-tested. Low-paid individuals are also much more likely to share their household with adults other than a partner (47 per cent compared with 31 per cent). In particular, 41 per cent of the low paid live with other adults who include other workers, compared with only 19 per cent of employees in general.

Table 4.1 Prevalence of strategies at first time period for employees who have avoided poverty

	All employees	Low-paid employees
	%	%
1. Long hours and/or second job	33	34
2a. Has a partner living in the household	72	58
2b. Has a partner who is an employee	53	42
2c. Has a partner who is not an employee	19	16
3. Benefits and tax credits more than 7% of income	24	37
4a. Lives with adults other than a partner	31	47
4b. Lives with other adults, at least one employed	25	41
4c. Lives with other adults, none employed	6	7
4d. Lives with other adults, all employed	19	29
No of observations	45,357	9,260

1. Sample is those employees who have avoided poverty in the first time period and for whom we have poverty status in the following period.
2. Weighted

Table 4.2 shows the number of strategies among the non-poor employees and low-paid employees. The low-paid and non-poor employees tend to have more strategies than all non-poor employees, with 60 per cent having two or more of the main strategies compared with 51 per cent of all employees. Looking at all seven, the same applies, with 32 per cent of the low-paid having four or more strategies compared with 24 per cent of all employees.

Table 4.2 Number of strategies at first time period for employees who have avoided poverty

	All employees	Low-paid employees
Four main strategies	%	%
None	6	1
1 only	42	37
2	38	45
3	12	14
4	1	1
All seven strategies		
None	6	1
1	6	7
2	33	23
3	31	37
4	11	18
5	8	9
6	5	5
7	*	*
No of observations	45,357	9,260

1. There are seven in total but some are alternatives so it is impossible for one person to have all nine strategies.
2. * less than 0.5 per cent
3. Sample is those employees who have avoided poverty in the first time period and for whom we have poverty status in the following period.
4. Weighted

Table 4.3 shows which strategy is being used by those with just one strategy. For all employees the most common strategy is having a partner (71 per cent) and for most (57 per cent that partner is also employed). Among the low-paid employees with just one of these strategies, having a partner is still the most common but is much less so (47 per cent) than among all employees. About a third (35 per cent) of low-paid employees with only one strategy live with other adults, and usually with at least one other employed adult.

Table 4.3 Prevalence of strategies at first time period for employees who have avoided poverty and only have one of the main strategies

	All employees	Low-paid employees
	%	%
1. Long hours and/or second job	8	7
2a. Has a partner living in the household	71	47
2b. Has a partner who is an employee	57	38
2c. Has a partner who is not an employee	14	9
3. Benefits and tax credits more than 7% of income	6	12
4a. Lives with adults other than a partner	15	35
4b. Lives with other adults, at least one employed	14	33
4c. Lives with other adults, none employed	1	1
4d. Lives with other adults, all employed	10	23
No of observations	19,534	3,492

1. Sample is those employees who have avoided poverty in the first time period and for whom we have poverty status in the following period.
2. Weighted

Table 4.4 shows all the possible two-way combinations of these four strategies. Among all employees the most common combination is working long hours and having a partner (22 per cent) followed by having a partner and income including high benefits/tax credits (16 per cent). For low-paid employees the most common combination is having a partner and income including high benefits/tax credits (22 per cent), followed by long hours and living with others (17 per cent). The least common combination for both all employees and low-paid employees is long hours and income with high benefits/tax credits (eight per cent of all and 11 per cent of the low paid).

Table 4.4 Pairs of strategies at first time period for employees who have avoided poverty

Percentage with:	Employees	Low-paid employees
Long hours and partner	24	17
Long hours and high benefits/tax credits	8	11
Long hours and other adults	11	18
Partner and high benefits/tax credits	16	21
Partner and other adults	15	15
High benefits/tax credits and other adults	8	14
No of observations	45,357	9,260

1. Sample is those employees who have avoided poverty in the first time period and for whom we have poverty status in the following period
2. Weighted
3. Note that individuals who use more than two strategies will appear more than once in this table.

Table 4.5 shows how the pairs of strategies differ for the employees in general and the low-paid employees, and reveals some different patterns. For all employees there is no relationship between working long hours and having a partner: those who work long hours are just as likely to have a partner (71 per cent) as those who do not work long hours (72 per cent). But among low-paid employees, those who work long hours are less likely to have a partner (50 per cent) than those who do not work long hours (62 per cent). Other differences are also apparent. Low-paid employees working long hours are less likely to receive tax credits than those not working long hours (32 per cent compared with 39 per cent) but are more likely to live with other adults (53 per cent compared with 44 per cent).

For low-paid employees there is no relationship between having a partner and having high benefits/tax credits, but this is not the case for all employees, where those with a partner are less likely to have high benefits/tax credits (22 per cent) than those with no partner (29 per cent). Among all employees, and even more so among the low paid, those with a partner are much less likely to live with other adults than those without a partner. Among the low paid, 25 percent of those with a partner live with other adults compared with 78 per cent of those without a partner. Low-paid people with high benefits/tax credits are less likely to live with other adults than those who do not have high benefit income (38 per cent compared with 53 per cent). The pattern of the findings described here is the same (but actual figures differ) if we look at the relationship the other way around: for example, those low-paid who live with other adults are less likely to have high benefits/tax credits than those who do not live with other adults (29 per cent compared with 44 per cent).

Table 4.5 Relationship between pairs of strategies: % with and without one strategy using another

	All employees		Low-paid employees	
	Yes	*No*	*Yes*	*No*
Long hours (yes or no) - % with partner	71	72	50	62
Long hours (yes or no) - % with high benefits/tax credits	23	24	32	39
Long hours (yes or no) - % with other adults	33	29	53	44
Partner (yes or no) - % with long hours	33	34	30	40
Partner (yes or no) - % with benefits/tax credits	22	29	37	37
Partner (yes or no) - % with other adults	20	56	25	78
Benefits/tax credits (yes or no) - % with long hours	32	34	29	37
Benefits/tax credits (yes or no) - % with partner	66	74	58	58
Benefits/tax credits (yes or no) - % with other adults	33	30	38	53
Other adults (yes or no) - % with long hours	36	32	38	31
Other adults (yes or no) - % with partner	48	82	31	83
Other adults (yes or no) - % with benefits/tax credits	26	23	29	44
No of observations	45,357		9,260	

1. Sample is those employees who have avoided poverty in the first time period and for whom we have poverty status in the following period.
2. Weighted.

To summarise the findings for the pairs of strategies used by the low paid, we find that the low paid are less likely to combine strategies than employees in general. Within the low-paid group there are different combinations of strategies and these are probably related to different family situations.

4.2 The success rate: the probability of continued poverty avoidance over time associated with each strategy

In this section we focus on those employees who avoid poverty (are non-poor) in the first year. For this group we can then determine how their chances of continuing to avoid poverty in the second year vary with the strategy used to avoid poverty in the first year; this is what we mean by the "success rate" of a strategy.

First, however, Table 4.6 shows the extent to which the different strategies are associated with poverty avoidance in the first year. For most of the strategies, those "with" are more likely to avoid poverty than those "without". Thus for example, 91 per cent of low-paid employees who work long hours are not poor, compared with 85 per cent who do not work long hours (a difference which is statistically significant, as indicated by the figures in the table being in

bold). For employees in general, those strategies which are associated with significantly higher chances of avoiding poverty are working long hours, having a partner (2a and 2b) and living with other employed adults (4b and 4d), whilst for low-paid employees it is all of these plus living with other adults (4a). However, the chances of avoiding poverty are significantly lower (for both low-paid and all employees) for some strategies: where there is non-employed partner, where there is high receipt of tax credits/benefits and where there are other non-employed adults in the household.

Table 4.6 Avoiding poverty (cross-sectional) for individuals with and without different strategies

		Employees				Low paid			
		Mean	(N)	Conf Interval		Mean	(N)	Conf Interval	
1. Long hours and/or 2nd job	Yes	**97**	**15825**	**97**	**97**	**91**	**3566**	**90**	**92**
	No	**95**	**31750**	**95**	**95**	**85**	**7106**	**84**	**86**
2a. Has a partner	Yes	**97**	**34310**	**96**	**97**	**89**	**6187**	**88**	**90**
	No	**93**	**13265**	**93**	**94**	**85**	**4486**	**84**	**86**
2b. Employed partner	Yes	**99**	**24959**	**99**	**99**	**96**	**4128**	**96**	**97**
	No	**92**	**22616**	**92**	**92**	**82**	**6545**	**81**	**82**
2c. Partner not employed	Yes	**90**	**9350**	**89**	**91**	**74**	**2058**	**73**	**76**
	No	**97**	**38225**	**97**	**97**	**90**	**8615**	**90**	**91**
3. High benefits/tax credits	Yes	**88**	**12588**	**87**	**88**	**77**	**4508**	**76**	**78**
	No	**94**	**34987**	**98**	**99**	**94**	**6165**	**94**	**95**
4a. Other adults	Yes	96	14066	96	96	**91**	**4689**	**90**	**92**
	No	95	33509	95	96	**84**	**5984**	**83**	**85**
4b. Other adults, 1+ employed	Yes	**98**	**11131**	**97**	**98**	**95**	**3805**	**95**	**96**
	No	**95**	**36444**	**95**	**95**	**82**	**6868**	**81**	**83**
4c. Other adults, none employed	Yes	**89**	**2935**	**88**	**90**	**73**	**884**	**70**	**76**
	No	**96**	**44640**	**96**	**96**	**88**	**9789**	**88**	**89**
4d. Other adults, all employed	Yes	**99**	**8267**	**98**	**99**	**97**	**2582**	**96**	**97**
	No	**95**	**39308**	**95**	**95**	**84**	**8091**	**83**	**85**
All		96	47575	95	96	87	10673	87	88

1. 'Avoiding poverty' (cross-sectional) is the proportion of the sample who are non-poor in any year.
2. Confidence intervals are for 95%.
3. Figures in bold where mean poverty avoidance associated with the strategy is statistically significant (ie. confidence intervals for 'yes' and 'no' are not overlapping).
4. Covers all 12 years.
5. Weighted

In Table 4.7 we explore the key results from our research – the probability of continued poverty avoidance over time associated with each strategy - for all employees and the low paid. In other words, this is how the chances of avoiding poverty between one year and the next vary by strategy, What is striking about the results is that all of the strategies are associated with a significant difference in the poverty avoidance risk, noting that the long hours strategy and the living with other adults strategy only show significant differences for the low paid. This

suggests that these strategies do matter or, in some sense, can help explain why the chances of avoiding poverty over time do differ across individuals, although this kind of analysis cannot show whether the strategies actually "cause" the differences in continued poverty avoidance that we observe.

In general, the broad pattern of these dynamic results is similar to the cross-sectional picture presented in the previous table. For employees, having a working partner is the most powerful strategy, whilst for the low paid other adults have an equally important role in avoiding poverty, as long as at least one of them is working. In fact, it seems that for these two strategies which involve living with other people (strategies 2 and 4), the distinction between whether these people work or not is crucial. Hence we find that for both employees and the low paid, living with other people, whether that be a partner or other adults has a negative impact on avoiding poverty if these other people are not also in paid work themselves. Thus our initial idea that living with other people who are not employed may help people to avoid poverty because those other people are contributing time, rather than money, into the household seems not to have been borne out by the results.

The long hours strategy seems to be linked with a relatively smaller positive difference in the probability of avoiding poverty for the low paid compared with living with partners or other adults, and the difference is not significant at all for all employees. The strategy of high benefits/tax credits appears on average to have a negative association with the chances of avoiding poverty in a dynamic context – staying out of poverty between one year and the next[10]. We examine whether this results also holds for smaller subgroups in our analyses below. Finally, for each strategy, whether it is linked with a positive or negative effect on continuing to avoid poverty, the low paid always have significantly worse average chances of avoiding poverty than all employees[11].

[10] This is the case even when we restrict the sample to those who are low paid in both of the pair of years; and also when we restrict it further to those who also use this strategy in both of the pair of years.

[11] We have also examined whether there have been any changes over time in the effectiveness of strategies, in terms of continued poverty avoidance. When we divided our time period into two - 1991 to 1996 and 1996 to 2002 – we did not find any statistically significant differences in the success rate of strategies between the two periods.

Table 4.7 Continued poverty avoidance by strategies

		Employees				Low paid			
		Mean	(N)	Conf Interval		Mean	(N)	Conf Interval	
1. Long hours and/or 2nd job	Yes	96	15308	96	96	**93**	**3248**	**92**	**0.93**
	No	96	30049	96	96	**90**	**6012**	**89**	**91**
2a. Has a partner	Yes	**97**	**33016**	**96**	**97**	**92**	**5466**	**91**	**93**
	No	**94**	**12341**	**94**	**94**	**89**	**3794**	**88**	**90**
2b. Employed partner	Yes	**98**	**24707**	**98**	**98**	**95**	**3980**	**94**	**95**
	No	**94**	**20650**	**93**	**94**	**88**	**5280**	**88**	**89**
2c. Partner not employed	Yes	**93**	**8308**	**93**	**94**	**86**	**1485**	**84**	**88**
	No	**96**	**37049**	**96**	**97**	**92**	**7775**	**91**	**93**
3. High benefits/tax credits	Yes	**91**	**10927**	**91**	**92**	**85**	**3439**	**84**	**87**
	No	**97**	**34430**	**97**	**98**	**94**	**5821**	**94**	**95**
4a. Other adults	Yes	96	13461	96	97	**93**	**4255**	**93**	**94**
	No	96	31896	95	96	**89**	**5005**	**88**	**90**
4b. Other adults, 1+ employed	Yes	**97**	**10861**	**97**	**97**	**95**	**3610**	**94**	**95**
	No	**96**	**34496**	**95**	**96**	**89**	**5650**	**88**	**89**
4c. Other adults, none employed	Yes	**94**	**2600**	**93**	**95**	**86**	**645**	**83**	**89**
	No	**96**	**42757**	**96**	**96**	**91**	**8615**	**91**	**92**
4d. Other adults, all employed	Yes	**98**	**8125**	**97**	**98**	**95**	**2482**	**94**	**96**
	No	**95**	**37232**	**95**	**96**	**89**	**6778**	**89**	**90**
All		96	45,357	96	96	91	9,260	90	92

1. 'Continued poverty avoidance' is the proportion of those who are non-poor in the first year who remain non-poor in the second year.
2. Sample is those who are non-poor in the first year and for whom we have poverty status in the next year.
3. Figures based on the sample who had strategy in the first of the two consecutive years.
4. 'Employee' and 'low paid' refer to status in the first of the two consecutive years.
5. Confidence intervals are for 95%.
6. Figures in bold where mean poverty avoidance associated with the strategy is statistically significant.
7. Covers all 12 years.
8. Weighted.

As presented in the previous table, we are primarily interested in how the strategy used in the first year (for the non-poor) is related to the chances of still being out of poverty a year later. However, one of the factors which underlies these results is how the individual's labour market status changes over this period. And we may well expect that this would be linked to the chances of avoiding poverty between one year and the next. Hence, we are also interested in whether employment shifts are more likely to happen for those with some strategies more than others, and whether these patterns help to explain our main results in Table 4.7.

This is what we examine in Table 4.8 and some interesting results emerge. Those low-paid who use the long hours strategy in year one are more likely to be higher paid (paid more than the low pay cut-off) in year two than those using other strategies (33 per cent compared to 26 on average). This indicates that those working long hours or having a second job are more likely to "escape" low pay than other non-poor low-paid individuals, which may be why

continued poverty avoidance is significantly higher for those using the long hours strategy than those who do not.

There is also evidence of negative labour market shifts associated with certain strategies: those who had an unemployed partner or high benefits/tax credits in the first year are more likely than those with other strategies to be out of the labour market in year two (20 and 19 per cent compared with 15 per cent on average). This may help to explain why having these strategies was found in Table 4.6 to be associated with significantly lower chances of avoiding poverty over time.

Table 4.8 Changes in labour market status by strategies

	All employees in first year	Low-paid employee in first year		
Status in second year	Non employees	Still low paid	Non paid	Higher paid
1. Long hours and/or 2nd job	9	53	14	33
2a. Has a partner	9	59	15	26
2b. Employed partner	8	60	13	27
2c. Partner not employed	13	56	20	23
3. High benefits/tax credits	13	58	19	23
4a. Other adults	9	61	13	26
4b. Other adults, 1+ employed	9	62	13	26
4c. Other adults, none employed	10	59	16	25
4d. Other adults, all employed	8	62	12	26
All	10	59	15	26

1. Figures based on the sample who were non-poor and had strategy in the first of the two consecutive years.
2. Covers all 12 years.
3. Weighted.

4.3 Low-paid employees: the characteristics associated with successful strategies

Our main interest in is what protects low-paid people from poverty, so here we focus on successful strategies, to explore the characteristics associated with these. In this section we therefore focus just on the low-paid employees and on the successful strategies[12].

Table 4.9 compares low-paid men and women. Men make up less than a third of the low-paid sample and women slightly more than two-thirds. Overall, the average probability of avoiding

[12] Thus we leave aside the strategies associated with a significantly reduced chance of ongoing poverty avoidance (namely, having a non-working partner, a high reliance on state benefits and tax credits, and living with other adults who do not work). But see the next section for further discussion of benefits and tax credits.

poverty does not differ significantly between men and women. This smaller sample of men may partly explain why some of the strategies that are significant for women are not found to be significant for men.

Men are more likely to have long hours of work than women, and there is a similar improvement in chances of avoiding poverty linked to this strategy for both men and women but, surprisingly, the results are significant for women but not for men. Relatively more women than men have a working partner (married or cohabiting) and for low-paid women there appears to be a large and significant associated improvement in chances of poverty, whilst for low-paid men there is no significant difference in the average probability of avoiding poverty over time. For low-paid men the most important strategy is living with other adults who work (to keep the table easy to read we present results for at least one other adult working and omit those for all other adults working). The results for both men and women are large and significant but relatively greater proportions of (probably young) low-paid men use this strategy and for them the effect appears to be greater.

To summarise, the only strategy which is associated with significantly better chances of avoiding poverty over time for low-paid men is living with other working adults; for low-paid women they seem to benefit from a range of strategies: paid work themselves, living with other adults who work, and having a partner who works, with the latter being the most common and most effective.

Table 4.9 Continued poverty avoidance by strategy by sex: low-paid employees

		Men				Women			
		Mean	(N)	Conf Interval		Mean	(N)	Conf Interval	
1. Long hours	Yes	93	1613	91	94	**93**	**1635**	**91**	**94**
	No	90	1283	89	92	**90**	**4729**	**89**	**91**
2a. Has a partner	Yes	91	1233	89	92	**93**	**4233**	**92**	**93**
	No	92	1663	91	93	**87**	**2131**	**86**	**89**
2b. Employed partner	Yes	93	844	91	95	**95**	**3136**	**94**	**96**
	No	91	2052	90	92	**87**	**3228**	**86**	**88**
4a. Other adults	Yes	**94**	**1698**	**93**	**95**	**93**	**2557**	**92**	**94**
	No	**88**	**1198**	**86**	**90**	**89**	**3807**	**88**	**90**
4b. Other adults, 1+ employed	Yes	**95**	**1439**	**94**	**96**	**94**	**2171**	**93**	**95**
	No	**88**	**1457**	**86**	**89**	**89**	**4193**	**88**	**90**
All		92	2896	91	93	91	6364	90	92

See notes to Table 4.6

We now examine the chances of avoiding poverty by age, where we split the low-paid sample in to four age groups: 21 and under, 22 to 35 years, 36 to 50 years, and aged 51 or older. Table 4.10 has a slightly different format to make it easier to present all the information for the four age groups. We now show only the mean chances of avoiding poverty associated with each strategy for each group. Where the mean for those with a strategy is statistically significantly different from the mean for those without the strategy (not presented in this table), the figures are shown in bold. The ratio of these two means – the chances of avoiding poverty over time with and without the strategy – is called the 'relative impact' and is given in the final column. This is intended to capture the estimated benefit (or disadvantage) to one's chances of avoiding poverty over time from using a particular strategy.

About 30 per cent of the sample are aged 22 to 35, about a quarter are 21 and under and around another quarter are aged 36 to 50. This leaves a smaller share, 18 per cent, who are in the oldest age group of 51 or above. There is some variation in the overall chances of avoiding poverty over time between the four age groups. Those aged 22 to 35 have a significantly worse average probability of continuing to avoid poverty than those aged 21 or under, and than the 36 to 50 age group.

The full set of strategies are not presented in the table: having a non-employed partner and a high reliance on state transfers (strategies 2c and 3) were found to be linked with a significantly negative impact for all age groups, so these were omitted from the table. Living with other adults who do not work (strategy 4c) was also omitted because it showed significantly poorer chances of avoiding poverty over time for two age groups, and insignificant findings for the other two age groups. Living with other adults who are all employed (strategy 4d) was also left out of Table 4.8 because it only reinforced the results for strategy 4b (living with other adults, where at least one is employed).

This means we have three broad strategies to consider: work for the low-paid individual, having a partner, living with other adults. For the youngest age group – those aged 21 and under – it is only strategies that involve living with other adults (strategies 4a and 4b) which are associated with significantly higher chances of avoiding poverty over time. The low paid aged between 22 and 35 benefit as much from having a working partner as from living with other adults, with over half of them have a working partner, whilst only about a quarter live

with other adults. For the two older age groups, having a partner is found to have the most benefit in terms of chances of avoiding poverty over time and more than three-quarters of them use this strategy. Living with other adults is also linked with a smaller but significant improvement in continued poverty avoidance for those 36 and older, but fewer of them use this strategy. The work strategy is only significant for the oldest age group – those aged 51 or above – and the relative impact is still well below that for all the other strategies in the table.

To summarise, if we compare just the two strategies of having an employed partner (2b) and living with other adults who work(4b), the former is significant for all but the youngest age group and the latter is significant for all ages. Living with other adults has a very large relative impact for the youngest group, for whom it is the most effective and usual strategy. The three older age groups more commonly rely on having a working partner which, for them, has a generally greater associated improvement in avoiding poverty.

Table 4.10 Continued poverty avoidance by strategies by age group: low-paid employees

Strategy	Age group	Low paid				
		Mean	(N)	Confidence Interval		Relative impact
1. Long hours and/or second job	21 or under	93	916	91	95	1.01
	22 to 35	91	1109	90	93	1.03
	36 to 50	93	793	91	95	1.01
	51 or over	**94**	**430**	**91**	**96**	**1.06**
2a. Has a partner	21 or under	91	266	87	94	99
	22 to 35	90	1878	89	92	1.02
	36 to 50	**95**	**1991**	**94**	**96**	**1.15**
	51 or over	**91**	**1331**	**90**	**93**	**1.10**
2b. Has an employed partner	21 or under	95	207	92	98	1.03
	22 to 35	**93**	**1531**	**91**	**94**	**1.07**
	36 to 50	**96**	**1541**	**95**	**97**	**1.12**
	51 or over	**95**	**701**	**94**	**97**	**1.11**
4a. Lives with adults other than a partner	21 or under	**93**	**2135**	**92**	**94**	**1.07**
	22 to 35	**94**	**680**	**92**	**96**	**1.07**
	36 to 50	94	965	92	95	1.03
	51 or over	**95**	**475**	**93**	**97**	**1.08**
4b. Lives with other adults, one or more is employed	21 or under	**94**	**1939**	**93**	**95**	**1.13**
	22 to 35	**95**	**516**	**93**	**97**	**1.08**
	36 to 50	**96**	**768**	**94**	**97**	**1.06**
	51 or over	**95**	**387**	**93**	**97**	**1.08**
All	21 or under	92	2434	91	93	
	22 to 35	90	2737	89	91	
	36 to 50	92	2403	91	93	
	51 or over	90	1686	88	91	

See notes to Table 4.6.

In section three, we calculated the chances of avoiding poverty time by household composition (Table 3.6). We do not present the figures for how the chances of avoiding poverty over time by strategy differ by household composition because the table would be very large and only a few significant results emerge. The long hours strategy is found to be associated with significantly better chances of avoiding poverty over time for only those low-paid individuals (single or in a couple) who neither have children nor live with other adults. Having an employed partner is linked to significantly better chances of continued poverty avoidance for only those couples who do not live with other adults, whether they have children or not. Living with other adults as long as at least one of them is employed is found to be a significantly beneficial strategy for only those who are single and do not have children.

As Table 4.11 shows, working long hours or having a second job only has a significantly positive success rate if there is only one worker on the household, and is the only strategy to have a significantly positive effect for one worker households. This is in contrast to the strategy of having a partner (or employed partner), which only has a significantly positive effect for households with three or more workers.

Table 4.11 Continued poverty avoidance by strategies by number of workers in the household: low-paid employees only

Strategy	Number of workers	Low paid				
		Mean	(N)	Confidence Interval		Relative impact
1. Long hours and/or second job	1	**87**	**844**	**85**	**89**	**1.08**
	2	93	1507	92	94	1.00
	3+	97	897	95	98	1.01
2a. Has a partner	1	84	1190	82	86	1.05
	2	93	3434	93	94	1.03
	3+	**98**	**842**	**97**	**99**	**1.03**
2b. Has an employed partner	1	-	0	-	-	-
	2	94	3222	93	94	1.02
	3+	**99**	**758**	**98**	**1.00**	**1.05**
4a. Lives with adults other than a partner	1	84	489	81	87	1.02
	2	92	1289	90	93	98
	3+	96	2477	95	97	*
4b. Lives with other adults, one or more is employed	1	-	0	-	-	-
	2	91	1133	90	93	98
	3+	96	2477	95	97	*
All	1	83	2428	81	84	
	2	93	4355	92	94	
	3+	96	2477	95	97	

* whole sample use strategy. See notes to Table 4.6.

How the success rate of the different strategies varies with the number of children in the household is examined in Table 4.12. For those households with none or one child, all of the strategies (long hours, partner, employed partner, living with other adults and living with other adults where at least one is employed) are associated with a significantly positive success rate; having an employed partner or living with other employed adults have the highest relative impact. For those households with two or more children, the only strategy which has a significantly positive success rate is having a partner, where the relative impact is higher if the partner is employed.

Table 4.12 Continued poverty avoidance by strategies by number of children: low-paid employees

Strategy	Number of children	Low paid				
		Mean	(N)	Confidence Interval		Relative impact
1. Long hours and/or second job	0	**94**	**1977**	**92**	**95**	**1.03**
	1	**94**	**622**	**92**	**96**	**1.05**
	2	88	452	85	91	0.98
	3+	87	197	82	92	1.02
2a. Has a partner	0	**93**	**2821**	**92**	**94**	**1.02**
	1	**93**	**1048**	**92**	**95**	**1.05**
	2	**91**	**1137**	**89**	**92**	**1.09**
	3+	**88**	**460**	**85**	**91**	**1.21**
2b. Has an employed partner	0	**96**	**1879**	**95**	**97**	**1.07**
	1	**95**	**810**	**94**	**97**	**1.07**
	2	**93**	**915**	**91**	**95**	**1.13**
	3+	**91**	**376**	**88**	**94**	**1.24**
4a. Lives with adults other than a partner	0	**94**	**2701**	**93**	**95**	**1.05**
	1	**93**	**1106**	**92**	**95**	**1.06**
	2	89	352	86	93	1.00
	3+	85	96	78	93	0.99
4b. Lives with other adults, one or more is employed	0	**95**	**2260**	**94**	**96**	**1.07**
	1	**94**	**981**	**93**	**96**	**1.08**
	2	91	301	88	94	1.03
	3+	89	68	82	97	1.04
All	0	92	5292	91	93	
	1	91	1977	90	93	
	2	89	1456	88	91	
	3+	86	535	83	89	

See notes to Table 4.6.

When we look at the success rate of the strategies for different housing tenures in Table 4.13 we find that working long hours is only associated with improved chances of continuing to avoid poverty for those low-paid employees who own their homes (with or without a

mortgage). The other strategies which have significantly positive success rates for home-owners are having an employed partner, living with other adults (if one has a mortgage), and living with other employed adults, with all of them having a similar relative impact. The only strategy which is associated with significantly improved chances of continued poverty avoidance for private renters is having an employed partner. Local authority renters particularly benefit from having an employed partner, whilst for housing association renters it is living with other adults that has the greatest impact on their chances of avoiding poverty over time.

Table 4.13 Continued poverty avoidance by strategies by housing tenure: low-paid employees only

Strategy	Housing tenure	Low paid				
		Mean	(N)	Confidence Interval		Relative impact
1. Long hours and/or second job	Owned	**95**	**388**	**93**	**97**	**1.05**
	Mortgagor	**96**	**1676**	**95**	**97**	**1.03**
	LA renter	84	600	82	87	1.06
	HA renter	88	153	83	94	1.02
	Private renter	88	425	85	91	1.02
2a. Has a partner	Owned	93	757	91	95	1.03
	Mortgagor	94	3075	93	95	1.00
	LA renter	86	892	84	88	1.14
	HA renter	87	207	83	92	1.00
	Private renter	88	531	86	91	1.03
2b. Has an employed partner	Owned	**97**	**410**	**96**	**99**	**1.08**
	Mortgagor	**96**	**2463**	**95**	**96**	**1.03**
	LA renter	**90**	**585**	**88**	**93**	**1.17**
	HA renter	88	148	83	93	1.01
	Private renter	**92**	**371**	**90**	**95**	**1.10**
4a. Lives with adults other than a partner	Owned	94	681	92	96	1.04
	Mortgagor	**95**	**2464**	**95**	**96**	**1.03**
	LA renter	**86**	**617**	**83**	**88**	**1.09**
	HA renter	**95**	**184**	**92**	**98**	**1.17**
	Private renter	84	309	80	88	1.04
4b. Lives with other adults, one or more is employed	Owned	**96**	**516**	**94**	**98**	**1.07**
	Mortgagor	**96**	**2195**	**95**	**97**	**1.04**
	LA renter	**88**	**487**	**85**	**91**	**1.12**
	HA renter	**96**	**154**	**93**	**99**	**1.17**
	Private renter	86	258	81	90	98
All	Owned	92	1354	91	94	
	Mortgagor	94	4945	94	95	
	LA renter	82	1544	80	84	
	HA renter	87	430	84	91	
	Private renter	87	978	85	89	

See notes to Table 4.6

4.4 Benefits and tax credits

Benefits and tax credits are generally a small component of income compared with wages. But, as we have seen, having a relatively high proportion[13] of income made up of benefits and tax credits, is associated with a lower level of poverty avoidance at one point in time (as table 4.6 above showed), for both low-paid employees and for all employees and those with high benefits/tax credits were less likely to stay out of poverty over the two consecutive years (as table 4.7 showed). Among the low-paid employees with high benefits/tax credits and who were not in poverty in the first year just 85 per cent had continued to avoid poverty, compared with 94 per cent of low-paid employees who avoided poverty in the first year without having high benefits/tax credits. Thus high benefits/tax credits were a relatively unsuccessful strategy in terms on ongoing poverty avoidance. In addition, high benefits/tax credits were also associated with a higher risk of negative labour market outcomes – higher rates of unemployment and lower rates of exit from low pay (table 4.8).

Having high benefit/tax credits was more common among low-paid employees than among employees in general (37 per cent compared with 24 per cent of all employees), and was more likely to be the only strategy for the low paid (12 per cent compared with six per cent of all employees) (see tables 4.1 and 4.3). Table 4.14 further shows that low-paid people with high benefits/tax credits tended to have different combinations of strategies than low-paid people in general. They were less likely to work long hours (29 per cent compared with 34 per cent), were less likely to have an employed partner (33 per cent compared with 42 per cent), and less likely to live with other adults (38 per cent compared with 47 per cent) and especially not other employed adults (25 per cent compared with 41 per cent).

[13] Defined as above the 75th percentile point, which was equivalent to seven per cent of household income.

Table 4.14 Prevalence of strategies at first time period: high benefits/tax credits and all low-paid employees

	Low-paid employees	Low-paid with high benefits/ tax credits
	%	%
1. Long hours and/or second job	34	29
2a. Has a partner living in the household	58	58
2b. Has a partner who is an employee	42	33
2c. Has a partner who is not an employee	16	25
3. Benefits and tax credits more than 7% of income	37	-
4a. Lives with adults other than a partner	47	38
4b. Lives with other adults, at least one employed	41	25
4c. Lives with other adults, none employed	7	13
4d. Lives with other adults, all employed	29	12
No of observations	9,260	3,439

1. Sample is those employees who have avoided poverty in the first time period and for whom we have poverty status in the following period.
2. Weighted

These differences are a reflection of the different characteristics of the low-paid people with high benefits/tax credits. As table 4.15 shows, the low-paid with high benefits/tax credits were more likely than low-paid people in general to be aged 22 to 35 (34 per cent compared with 30 per cent), to be lone parents (10 per cent in total compared with four per cent), to be couples with children (34 per cent in total compared with 28 per cent), to be sole earners (44 per cent compared with 26 per cent), to have children and especially two or more children (36 per cent compared with 22 per cent), and to be LA tenants (28 per cent compared with 17 per cent). They were therefore correspondingly less likely to be under 21, to be single, to be living with others, in multi-earner households, and be owner-occupiers. This is to be expected, given the type of people who are most likely to be eligible for benefits and tax credits (this pre-dates the extension of tax credits to single and childless people in 2003).

Table 4.15 Characteristics: low-paid employees with high benefits/tax credits at first period and all low-paid employees

	Low-paid employees	Low-paid with high benefits/tax credits
	%	%
Sex		
Men	31	31
Women	69	69
Age		
21 or under	26	18
22 -35	30	34
36-50	26	24
50+	18	24
Household composition		
Single, no children, no other adults	6	6
Single, no children, other adults	32	25
Single, children, no other adults	3	8
Single, children, other adults	1	2
Couple, no children, no other adults	23	19
Couple, no children , other adults	8	6
Couple, children, no other adults	24	30
Couple, children, other adults	4	4
No of Workers		
1	26	44
2	47	43
3+	27	12
Number of Children		
0	57	45
1	21	19
2	16	23
3+	6	13
Tenure		
Owner-occupier	15	18
Mortgagor	53	39
LA rented	17	28
HA rented	5	1
Private renter	11	8
	9260	3439

4.5 The overall impact of the strategies

In Table 4.16 we combine the information on the prevalence of strategies and their success rate to examine their overall impact; this is calculated as the prevalence multiplied by the chances of continuing to avoid poverty associated with that strategy, divided by the overall chances of continuing to avoid poverty. These figures show that having a partner is the strategy that has the greatest overall impact for both employees in general and the low-paid, but the impact is greater for all employees than for the low-paid (73 per cent compared to 59 per cent). We can

see that what is mainly driving this result is the prevalence of this strategy, with having a partner being by far the most prevalent strategy. The relative importance of other strategies in terms of their overall impact differs between the low-paid and employees in general. For employees in general, working long hours and living with other adults are the next most (but much less) significant, each accounting for about 30 per cent of cases where poverty is avoided over time (but note that these figures do not sum to 100 because strategies are not mutually exclusive and therefore people who continue to avoid poverty can have more than one strategy). For all employees, high benefits/tax credits is the least important of the main strategies, as we might expect. Turning to the low-paid, the second most important main strategy for this group is living with other adults, accounting for just under 50 per cent of cases where poverty is avoided over time. Hence the overall impact of this strategy is not much below that of having a partner, for the low-paid. Working long hours and being in receipt of high benefits/tax credits have the same overall impact for the low-paid, at 35 per cent.

Table 4.16 The overall impact of the strategies

	Employees			Low paid		
	Prevalence of strategy	Chances of continuing to avoid poverty	Overall impact	Prevalence of strategy	Chances of continuing to avoid poverty	Overall impact
1. Long hours and/or 2nd job	33	96	33	34	93	35
2a. Has a partner	72	97	73	58	92	59
2b. Employed partner	53	98	54	42	95	44
2c. Partner not employed	19	93	18	16	86	15
3. High benefits/tax credits	24	91	23	37	85	35
4a. Other adults	31	96	31	47	93	48
4b. Other adults, 1+ employed	25	97	25	41	95	43
4c. Other adults, none employed	6	94	6	7	86	7
4d. Other adults, all employed	19	98	19	29	95	30
All		96			91	

1. The overall impact measures the share of cases where individuals continue to avoid poverty which are associated with each strategy. It is calculated as the prevalence multiplied by the chances of continuing to avoid poverty associated with that strategy, divided by the overall chances of continuing to avoid poverty.
2. Because the strategies are not mutually-exclusive (people can have more than one) then the overall impact figures do not sum to 100.
3. Figures in first and forth columns are from Table 4.1 and in second and fifth columns from Table 4.6.
4. Covers all 12 years.
5. Weighted

5. Summary

The aim of this project is to explore the relationship between low pay, household income sources and poverty over time, using data from the British Household Panel Survey 1991 to 2002. There were three main parts to the analysis.

In Section 2 we examined the *extent and persistence of low pay and poverty* among employees and the low-paid in the BHPS over the period 1991 to 2002. Low pay is defined as gross hourly wages below two-thirds of the median in each year. Around 21 per cent of all employees were low-paid in each year, according to this definition, with a peak of 24 per cent in 1996. Looking over a four-year time period shows a higher prevalence of low pay, with 26

per cent of employees experiencing at least one spell of low paid in the four year period, compared with the average 18 per cent who were low paid in one of the four years, and 13 per cent of employees were persistently (in three or four years out of the four) low paid. Women were more likely than men to have at least one spell of low pay, and to be persistently low paid.

Using a poverty definition consistent with the Households Below Average Income series, with a poverty line set at 60 per cent of median household equivalised disposable income before housing costs, about four to five percent of employees were estimated to be in poverty in any one year, compared with around 11 to 15 per cent of low-paid employees. The low paid are thus typically about three times as likely as employees in general to be living in poverty, and were also more likely to be persistently poor.

Section 3 explored the extent to which all employees and low-paid employees *continued to avoid poverty over two consecutive years*. Among all employees 96 per cent of those who were not in poverty in the first year were still not in poverty in the second year. Among low-paid people, however, this fell to 91 per cent. The chances of continuing to stay out of poverty varied with the average time out of poverty already, such that the longer a person had avoided poverty the better the chance of continuing to do so. This was true for both low-paid and all employees.

For all employees, there were some significant differences in the chances of continuing to avoid poverty by age, household composition, number of children, number of workers and tenure but overall most employees do continue to stay out of poverty. Among the low paid, there was more variation. Low-paid people had more chance of being able to stay out of poverty if they were living with others (for all except lone parents), if they had three or more workers in the household, or if they were owner-occupiers. But they had less chance if they were single people, if they were living alone, if they were a lone parent (whether living alone or with others), if they were in sole-earner household, if they had three plus children, or if they were LA or private tenants.

Section 4 reported the main results examining the *impact of the strategies used to avoid poverty over two consecutive years*. We identified four main strategies – working long hours, living with a partner, having high benefits/tax credits, and living with people other than a

partner. For the first and fourth of these we also explored whether or not the partner and the other people were employed.

In looking at these strategies we started by exploring their *prevalence*, and then comparing whether low-paid people tended to use different strategies from employees in general. There was no difference in respect of long working hours, but low-paid employees were less likely than all employees to have a partner, or an employed partner, but were more likely to have high benefits/tax credits, to live with other people, including other people in employment. Low-paid people also tended to use more strategies then all employees, and to use different combinations. Among low-paid employees, the most common pair of strategies was high benefits/tax credits and a partner (21 per cent). Among all employees, the most common pair of strategies was to work long hours and a partner (24 per cent).

The *success rate* of each strategy was defined as the probability of continued poverty avoidance at the second year associated with having used each strategy in the first year. The successful (i.e. those with this strategy had a higher rate of ongoing poverty avoidance than those without) and unsuccessful (i.e. those with this strategy had a lower rate of ongoing poverty avoidance than those without) strategies were generally the same for the low-paid and for all employees. The successful strategies were: working long hours, having a partner, having an employed partner, living with other adults, living with other employed adults. The unsuccessful strategies were having a non-employed partner, having high benefits/tax credits, and living with other non-employed people.

Changes in employment status are likely to be a factor in ongoing poverty avoidance. The analysis showed that different employment changes were associated with the different strategies. Those low-paid with long hours in year one were more likely to be higher paid (i.e. paid more than the low pay cut-off) in year two than those using other strategies (33 per cent compared to 26 per cent on average). This indicates that those working long hours or having a second job are more likely to “escape“ low pay than other non-poor low-paid individuals, which may be why continued poverty avoidance is significantly higher for those using the long hours strategy than those who do not. By contrast, those who had an unemployed partner or high benefits/tax credits in the first year were more likely than those with other strategies to be out of the labour market in year two (19-20 per cent compared with 15 per cent on average).

This may help to explain why having these strategies was found to be associated with significantly lower chances of avoiding poverty over time.

Focusing just on the low-paid employees and the successful strategies, we found that there were some significant differences according to personal and household characteristics. For low-paid men, the only strategy which is associated with significantly better chances of avoiding poverty over time for low-paid men was living with other working adults. But low-paid women seem to benefit from a range of strategies: paid work themselves, living with other adults who work, and having a partner who works, with the latter being the most common and most effective. Living with other adults has a very large relative impact for the youngest group, for whom it is the most effective and usual strategy. The three older age groups more commonly rely on having a working partner which, for them, has a generally greater associated improvement in avoiding poverty. The long hours strategy is most likely to be successful for people who neither live with others nor have children, for those in sole-earner households, and for owner-occupiers. For those households with two or more children, the only strategy which has a significantly positive success rate is having a partner, where the relative impact is higher if the partner is employed.

Looking in more detail at one of the unsuccessful strategies – high benefits and tax credits – showed that those with this strategy tended to have different combinations of strategies than low-paid people in general. They were less likely to work long hours, to have an employed partner, to live with other adults, and especially not other employed adults. This reflected differences in their characteristics, as they were more likely to be families with children, sole-earner families, large families and to be LA tenants.

Finally, we looked at the *overall impact* of each strategy, defined as the share of all cases where poverty is avoided over time which is accounted for by each strategy. Having a partner is the strategy that has the greatest overall impact for both employees in general and the low-paid, but the impact is greater for all employees than for the low-paid. This is by far the most prevalent strategy, which is the key factor driving this result. The overall impact of the other strategies differs between the low-paid and employees in general. For employees in general, working long hours and living with other adults are the next most important, and high benefits/tax credits are the least important. For low-paid employees, the second most important

main strategy for this group is living with other adults, while working long hours and having high benefits/tax credits have about the same impact.

Thus, overall, this analysis has shown that, compared with all employees, low-paid people are less likely to be able to avoid poverty, either at one point in time or over time. But many do manage to avoid poverty and to continue to stay out of poverty over time. Having an employed partner, or living with other employed adults is crucial in this. Working long hours is successful for some, and is also associated with movements out of low pay. Relying on state support is associated with a lower probability of avoiding poverty and avoiding poverty over time. The people who are most likely to be doing this are single-household families with children, who also have a higher than average risk of moving out of low-paid jobs into unemployment.

Annex

Definition of the sample

For our analyses of poverty which cover the whole population (Table 2.3), the only sample restrictions we impose are that the individuals are resident in Great Britain (Northern Ireland is excluded) and that we have non-missing information on their household income (see below), so as to be able to measure their poverty status. Our main sample of interest focuses on employees. This is defined to include those who are aged sixteen or above and not a dependent child, resident in Great Britain, and currently working as an employee. Employees are defined as those who have done any paid work in the last week or who have a paid job that they were away from last week. Further restrictions for practical data reasons are that observations must have non-missing and non-zero data for usual pay from main job, and usual basic hours and paid overtime hours for main job need to be non-missing and total to more than zero.

Definition of pay

Analyses of low pay are based on hourly gross pay, calculated using usual pay from current main job and usual basic and paid overtime hours from main job.

Definition of household income

The definition of household income we use to measure poverty is equivalised disposable household income. Variables on disposable household income are available in the form of the derived current net household income variables, provided by E. Bardasi and S.P. Jenkins as an unofficial supplement to the BHPS derived variables (for more information see Bardasi *et al*, 1999).

The definition of these variables matches, as close as possible, the definition of income used in HBAI (DWP, 2005), Britain's unofficial income distribution statistics. Disposable household income is defined, for individuals where all eligible household members gave a full interview, as the sum across all household members of cash income from all sources (income from employment and self-employment, investments and savings, private and occupational pensions, and other market income, plus cash social security and social assistance receipts and private transfers minus direct taxes (income tax, employee National Insurance Contributions,

local taxes such as the community charge and the council tax) and occupational pension contributions. The time period over which current income components are measured is the month prior to the interview or the most recent relevant period (except for employment earnings which are 'usual earnings'). The only adjustment we make to this is to subtract maintenance payments from income because they were not available in the first year of the data and we want income to be consistently defined across years.

Equivalisation

Incomes are equivalised using the McClement's before housing costs equivalence scale, in line with the approach used in HBAI.

Weights

All results are weighted using the enumerated cross-sectional weights provided within the BHPS.

Defining the sample for analysis of ongoing poverty avoidance.

There are various different ways of defining the sample for the analysis of ongoing poverty avoidance. We can include just those who were low-paid employees (and all employees, for comparative purposes) at the first time period and examine what happens to them, or only those who were low-paid employees in both time periods, or those who were low-paid employees in either period. Or we could maximise the sample size by including those who were low-paid employees at any time period at all out of the twelve observations. Or focus only on those who were low-paid employees in every time period, which would give a much smaller sample. Table A.1 shows the results for each of these groups. In addition to showing the average (mean) chance of avoiding poverty, we also show the 95 per cent confidence interval, and provide the number of observations used to produce the estimates, so that the statistical significance of different results can be assessed.

Several points arise from the findings presented in Table A.1. First, no matter how we choose to define samples of 'employees' and 'low-paid employees', the former always have a significantly greater chance of continuing to avoid poverty than the latter. Secondly, depending on how we define the sample, employees have on average a chance of between 95 and 99 percent of continuing to avoid poverty compares with a chance of between 91 and 93 per cent for low-paid employees. Thirdly, different choices about defining the samples of employee and

low-paid employees do produce statistically significant differences in the chances of avoiding poverty, as well as in the number of observations in the resulting sample.

Table A.1 Avoiding poverty in two consecutive years

	Category	Mean	N	Confidence interval	
In category in first of pair of years	Employees	96	45,357	96	96
	Low paid	91	9,260	90	92
In category in both of pair of years	Employees	98	41,054	98	98
	Low paid	93	5,370	93	94
In category in either of pair of years	Employees	96	48,388	96	96
	Low paid	91	12,430	91	92
In category in any year at all years	Employees	95	56,484	94	95
	Low paid	92	23,927	91	92
In category in all 12 years	Employees	99	9,353	98	99
	Low paid	92	165	88	96

1. 'Avoiding poverty' is the proportion of those who are non-poor in the first year who remain non-poor in the second year
2. Includes data from all 12 years
3. Weighted

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